Please provide the following information, and submit to the NOAA DM Plan Repository.

# Reference to Master DM Plan (if applicable)

As stated in Section IV, Requirement 1.3, DM Plans may be hierarchical. If this DM Plan inherits provisions from a higher-level DM Plan already submitted to the Repository, then this more-specific Plan only needs to provide information that differs from what was provided in the Master DM Plan.

URL of higher-level DM Plan (if any) as submitted to DM Plan Repository:

# 1. General Description of Data to be Managed

# 1.1. Name of the Data, data collection Project, or data-producing Program:

2014 Lidar DEM: St. Charles Parish (LA)

# 1.2. Summary description of the data:

Under this task order, Precision Aerial Reconnaissance, LLC was contracted to provide acquisition and processing of airborne Lidar over St. Charles Parish, Louisiana. Airborne Lidar was captured to provide digital elevation models, lidar intensity imagery and contours for the project area. The NOAA Office for Coastal Management received the data for processing to the Digital Coast. This metadata record describes the 2 ft bare earth raster digital elevation models (DEMs) created from the lidar point data.

In addition to the raster DEM data, the lidar point data are also available. These data are available for download here: https://coast.noaa.gov/dataviewer/#/lidar/search/where:ID= The DEM products have not been reviewed by the NOAA Office for Coastal Management (OCM) and any conclusions drawn from the analysis of this information are not the responsibility of NOAA, OCM or its partners.

Original contact information:

Contact Name: Luis Martinez

Contact Org: St Charles Parish, LA

Title: GIS Coordinator

Phone: 504.235.1902

Email: lmartinez@stcharlesgov.net

# 1.3. Is this a one-time data collection, or an ongoing series of measurements?

One-time data collection

# 1.4. Actual or planned temporal coverage of the data:

2014-02-15 to 2014-03-30

# 1.5. Actual or planned geographic coverage of the data:

W: -90.549763, E: -90.169503, N: 30.081556, S: 29.696955

# 1.6. Type(s) of data:

(e.g., digital numeric data, imagery, photographs, video, audio, database, tabular data, etc.) Map (digital)

# 1.7. Data collection method(s):

(e.g., satellite, airplane, unmanned aerial system, radar, weather station, moored buoy, research vessel, autonomous underwater vehicle, animal tagging, manual surveys, enforcement activities, numerical model, etc.)

# 1.8. If data are from a NOAA Observing System of Record, indicate name of system:

# 1.8.1. If data are from another observing system, please specify:

# 2. Point of Contact for this Data Management Plan (author or maintainer)

# 2.1. Name:

NOAA Office for Coastal Management (NOAA/OCM)

### 2.2. Title:

Metadata Contact

# 2.3. Affiliation or facility:

NOAA Office for Coastal Management (NOAA/OCM)

# 2.4. E-mail address:

coastal.info@noaa.gov

# 2.5. Phone number:

(843) 740-1202

# 3. Responsible Party for Data Management

Program Managers, or their designee, shall be responsible for assuring the proper management of the data produced by their Program. Please indicate the responsible party below.

# 3.1. Name:

## 3.2. Title:

Data Steward

# 4. Resources

Programs must identify resources within their own budget for managing the data they produce.

# 4.1. Have resources for management of these data been identified?

# 4.2. Approximate percentage of the budget for these data devoted to data management ( specify percentage or "unknown"):

# 5. Data Lineage and Quality

NOAA has issued Information Quality Guidelines for ensuring and maximizing the quality, objectivity, utility, and integrity of information which it disseminates.

# 5.1. Processing workflow of the data from collection or acquisition to making it publicly accessible

(describe or provide URL of description):

**Process Steps:** 

- 2014-06-19 00:00:00 All products were reviewed and approved by ASPRS Certified Photogrammetrist, Ken Comeaux.
- 2014-06-19 00:00:00 DATA ACQUISITION: Ground Control Survey: All lidar control and check points were collected by Precision Aerial Reconnaissance field crews by means of Real time VRS with a Trimble R10 receiver with internal antennas and using a TSC3 data collector. Trimble Business Center (TBC) software was used to process collected field data against a network of established NGS control. Each control or check point was occupied for a duration of at least 3 minutes. LiDAR check points were collected in the following ground classification categories: Bare Ground, Marsh, Tall Grass and Urban. In addition, a sampling of vertical LiDAR control points was collected in areas of Bare Ground. The LiDAR check and control points were also collected using VRS-RTK techniques. - LiDAR Acquisition: The LiDAR data was collected using a Leica ALS70CM sensor between 15-Feb-2014 and 30-Mar-2014 at an altitude of 4,500 feet AMT with a planned average point density of 9.1 points per square meter to support the generation of 2' contours meeting FEMA specifications for Aerial Mapping and Surveying to Support 2-foot contours. The LiDAR collection was supported by ground base stations. - 2014-06-19 00:00:00 - LIDAR PROCESSING: - LiDAR Calibration: Initial processing of the GPS and IMU data was performed using Leica IPAS TC. The SOL was generated and Leica ALS Post Processor software was used to generate georeferenced laser returns which were then processed in strip form allowing for the QC of the overlap between strips (lines). The data from each line were combined and automated classification routines run to determine the initial surface model. This initial surface model was then verified to the LiDAR test points. - LiDAR Classification: The calibrated LiDAR data was run through automated classification routines and then manually checked. The data was classified into the following classes: Unclassified (1) , Ground (2), Medium Vegetation (4), Low point and noise (7), Water (9) and Overlap (12). - Breakline Collection: Breaklines were collected in a 3-D MicroStation/ Terrasolid software environment. Breakline vertex elevations were established based on surrounding lidar point elevations. - DEM Creation: Terrasolid software was used to generate DEMs from a Triangulated Irregular Network (TIN) comprised of lidar points and 3-D hydro-enforcement breaklines.
- 2017-07-27 00:00:00 The NOAA Office for Coastal Management (OCM) received

770 files in .adf format. The bare earth raster files were at a 2 ft grid spacing. The data were in LA State Plane South, Zone 1702 (NAD83 NA11) coordinates and NAVD88 elevations in feet. OCM did the following for Digital Coast storage and provisioning purposes: 1. Converted the .adf format files to .tif format using gdal\_translate 2. Converted the files from vertical units of feet to meters using gdal\_translate 3. Copied the raster files to database and https

# 5.1.1. If data at different stages of the workflow, or products derived from these data, are subject to a separate data management plan, provide reference to other plan:

# 5.2. Quality control procedures employed (describe or provide URL of description):

### 6. Data Documentation

The EDMC Data Documentation Procedural Directive requires that NOAA data be well documented, specifies the use of ISO 19115 and related standards for documentation of new data, and provides links to resources and tools for metadata creation and validation.

# 6.1. Does metadata comply with EDMC Data Documentation directive?

No

# 6.1.1. If metadata are non-existent or non-compliant, please explain:

Missing/invalid information:

- 1.7. Data collection method(s)
- 3.1. Responsible Party for Data Management
- 4.1. Have resources for management of these data been identified?
- 4.2. Approximate percentage of the budget for these data devoted to data management
- 5.2. Quality control procedures employed
- 7.1. Do these data comply with the Data Access directive?
- 7.1.1. If data are not available or has limitations, has a Waiver been filed?
- 7.1.2. If there are limitations to data access, describe how data are protected
- 7.4. Approximate delay between data collection and dissemination
- 8.1. Actual or planned long-term data archive location
- 8.3. Approximate delay between data collection and submission to an archive facility
- 8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?

# 6.2. Name of organization or facility providing metadata hosting:

NMFS Office of Science and Technology

# 6.2.1. If service is needed for metadata hosting, please indicate:

## 6.3. URL of metadata folder or data catalog, if known:

https://www.fisheries.noaa.gov/inport/item/49432

# 6.4. Process for producing and maintaining metadata

(describe or provide URL of description):

Metadata produced and maintained in accordance with the NOAA Data Documentation Procedural Directive: https://nosc.noaa.gov/EDMC/DAARWG/docs/EDMC\_PD-Data\_Documentation\_v1.pdf

### 7. Data Access

NAO 212-15 states that access to environmental data may only be restricted when distribution is explicitly limited by law, regulation, policy (such as those applicable to personally identifiable information or protected critical infrastructure information or proprietary trade information) or by security requirements. The EDMC Data Access Procedural Directive contains specific guidance, recommends the use of open-standard, interoperable, non-proprietary web services, provides information about resources and tools to enable data access, and includes a Waiver to be submitted to justify any approach other than full, unrestricted public access.

# 7.1. Do these data comply with the Data Access directive?

# 7.1.1. If the data are not to be made available to the public at all, or with limitations, has a Waiver (Appendix A of Data Access directive) been filed?

# 7.1.2. If there are limitations to public data access, describe how data are protected from unauthorized access or disclosure:

# 7.2. Name of organization of facility providing data access:

NOAA Office for Coastal Management (NOAA/OCM)

## 7.2.1. If data hosting service is needed, please indicate:

## 7.2.2. URL of data access service, if known:

https://coast.noaa.gov/dataviewer/#/lidar/search/where:ID=6353 https://coast.noaa.gov/htdata/raster2/elevation/LA St Charles DEM 2014 6353

# 7.3. Data access methods or services offered:

This data can be obtained on-line at the following URL: https://coast.noaa.gov/dataviewer/#/lidar/search/where:ID=6353;

# 7.4. Approximate delay between data collection and dissemination:

# 7.4.1. If delay is longer than latency of automated processing, indicate under what authority data access is delayed:

# 8. Data Preservation and Protection

The NOAA Procedure for Scientific Records Appraisal and Archive Approval describes how to identify, appraise and decide what scientific records are to be preserved in a NOAA archive.

# 8.1. Actual or planned long-term data archive location:

(Specify NCEI-MD, NCEI-CO, NCEI-NC, NCEI-MS, World Data Center (WDC) facility, Other, To Be Determined, Unable to Archive, or No Archiving Intended)

- 8.1.1. If World Data Center or Other, specify:
- 8.1.2. If To Be Determined, Unable to Archive or No Archiving Intended, explain:
- **8.2. Data storage facility prior to being sent to an archive facility (if any):** Office for Coastal Management Charleston, SC
- 8.3. Approximate delay between data collection and submission to an archive facility:
- 8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?

Discuss data back-up, disaster recovery/contingency planning, and off-site data storage relevant to the data collection

# 9. Additional Line Office or Staff Office Questions

Line and Staff Offices may extend this template by inserting additional questions in this section.